REMARKS

Reconsideration of this application is requested. Claims 1, 3-5, 18-22 and 24 are pending and at issue.

Claims 1, 3-5, 18-22, and 24 have been rejected under 35 U.S.C. §103(a) as obvious over Katagiri or Taylor in view of Wieczorek.

Applicants respectfully traverse this rejection and respectfully request reconsideration.

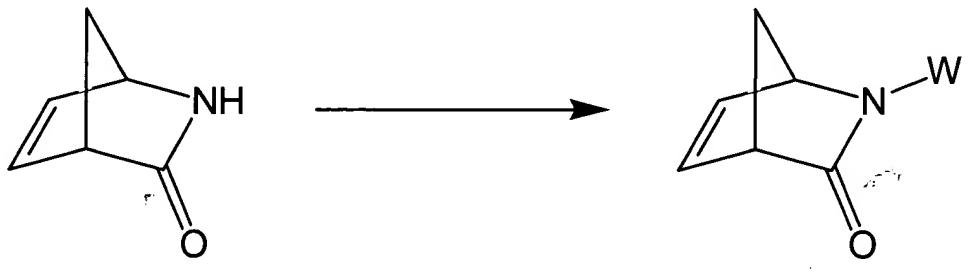
I. The Presently Claimed Process is Novel and Non-Obvious

The Examiner argues that because the presently claimed process includes the same starting compound and ending compound as in the prior art process taught by Katagiri and Taylor, the process is the same. The sole difference between the presently claimed process and that of the cited prior art according to the Examiner is that the former uses lithium borohydride while the latter uses sodium borohydride.

Many patented processes use the same starting materials and form the same end products as those in the prior art. As long as a claimed process has at least one step that is novel and non-obvious, it is patentable over the prior art. See M.P.E.P. §2143.03.

The presently claimed process has a novel and non-obvious step, i.e., reducing (in claims 1, 3-5, and 18-22) or reacting (in claim 24) 2-azabicyclo[2.2.1]hept-5-en-3-one ("the Vince lactam") with lithium borohydride to yield 1-amino-4-hydroxymethyl-2-cyclopentene ("the aminoalcohol").

Neither Taylor nor Katagiri disclose or suggest reducing or reacting the Vince lactam with lithium borohydride to yield the aminoalcohol. In both Katagiri and Taylor, the Vince lactam is first substituted with an electron withdrawing group as shown below:



Vince Lactam Substituted Vince Lactam

See, for example, chart 6 on page 1114 of Katagiri (an electron withdrawing group W is attached to compound 1 to yield compound 10c); and step i of scheme 3 on page 1123 of Taylor (a CO_2tBu group is attached to compound 1b (the Vince lactam) to form a substituted Vince lactam).

Second, the substituted Vince lactam is isolated. See Katagairi, page 1118, sixth, seventh, and eighth full paragraphs in the left column entitled "2-Carbamoyl-2-azabicyclo[2.2.1]hept-5-en-3-one (10c)", "cis-4-Hydroxymethyl-1-(N'-methylureido)cyclopent-2-ene (11d)", and "cis-4-p-Toluenesulfonylaminocyclopent-2-enylmethanol (11a) and cis-4-Hydroxymethyl-1-ureidocyclopent-2-ene (11c)", respectively (compound 11c was isolated by silica gel column chromatography); Taylor, page 1127, first full paragraph (the substituted Vince lactam was isolated and purified by recrystallization).

Third, the isolated **substituted** Vince lactam is reacted with sodium borohydride to form the aminoalcohol. See, for example, lines 1-4 on the right column of page 1114 of Katagiri (compound 10c (the substituted Vince lactam) is reacted with sodium borohydride);

and steps ii and iii on page 1123 of Taylor (the CO_2tBu substituted Vince lactam is reacted with sodium borohydride ($NaBH_4$) to form the aminoalcohol).

Therefore, both Katagiri and Taylor form an isolated substituted Vince lactam which is then reduced with sodium borohydride. Unlike Katagiri and Taylor, the presently claimed process does not form a substituted Vince lactam having an electron withdrawing group.

Neither Taylor nor Katagiri reduces or reacts the unsubstituted Vince lactam with lithium borohydride to yield the aminoalcohol.

In fact, both Katagiri and Taylor ***teach away*** from reducing the unsubstituted Vince lactam with a metallic borohydride. In this regard, Taylor states:

> "The [Vince] lactam is first converted to an ester-amide derivative, ... which is reduced with an activated borohydride ... to reach the key aminoalcohol (5). This route is used since the lactam is inert to direct reduction by sodium borohydride." (Taylor at page 1122, lines 3-6).

Likewise, Katagiri states that "the N-unsubstituted [Vince lactam] is stable to sodium borohydride reduction". See page 1114, right column, lines 1-4. Therefore, one skilled in the art would not have motivation or a reasonable expectation of success for reducing or reacting the unsubstituted Vince lactam with lithium borohydride to yield the aminoalcohol.

II. The Transitional Phrase "Comprising" Is Open-Ended, But In Order To Anticipate Or Render Obvious, the Prior Art Must Disclose or Suggest the Claimed Process Step

The Examiner states:

> "The claims are open in their use of 'comprising'. The claims thus also encompass isolating since they use such open language of 'comprising'."

In order for a claim to be anticipated or obvious, the prior art must disclose or suggest all of the recited limitations in the claim, regardless of the transitional phrase. See M.P.E.P. §2131 ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)); M.P.E.P. §2143.03 ("To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). 'All words in a claim must be considered in judging the patentability of that claim against the prior art.' *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)"). See also *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1611-13 (Fed. Cir. 1997) ("comprising" allows the addition of other elements so long as the named elements, which are essential, are included); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1271, 229 USPQ 805, 812 (Fed. Cir. 1986) ("comprising" opens a method claim to the inclusion of additional steps, but does not affect the scope of the structure recited within the steps). The pending claims require the step of

reducing or reacting the Vince lactam with lithium borohydride to form the aminoalcohol. As discussed above, the prior art does not disclose or suggest this step.

Wieczorek does not disclose or suggest reducing or reacting an unsubstituted Vince lactam with lithium borohydride.

Therefore, Katagiri, Taylor, and Wieczorek alone or in combination fail to render obvious the presently claimed invention and this rejection should be withdrawn.

In view of the above remarks, it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Respectfully submitted

Jay P. Lessler
Reg. No. 41,151
Attorney for Applicants

DARBY & DARBY
Post Office Box 5257
New York, NY 10150-5257
Phone (212) 527-7700